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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,419	01/10/2002	Stefan Blomgren	HPX0072-PCT	8781
28970	7590	01/04/2005	EXAMINER	
SHAW PITTMAN IP GROUP 1650 TYSONS BOULEVARD SUITE 1300 MCLEAN, VA 22102			LOWE, MICHAEL S	
			ART UNIT	PAPER NUMBER
			3652	
DATE MAILED: 01/04/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/030,419	Applicant(s) BLOMGREN ET AL.	
	Examiner M. Scott Lowe	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-17 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 10-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-9 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/17/04 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17,2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588).

Re claims 17,2, Muller teaches a method for rapid transfer of a work object in both the horizontal and vertical directions using a robot unit having a gripping mechanism 20, the workpiece weighing between one kilo and forty kilos and transfer it in the horizontal direction 1 to 10 meters along a beam member 12; the robot 14 controlled by a control unit and driven by a single belt 22 and at least 2 motors 32, 40 comprising rotor unit connected to the drive wheels; the motors immovably arranged in relation to workstations (not numbered) and transfer of the work object done without displacement of the motors; the movement along a pre-programmed path monitored

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and controlled continuously through registration of the situation of each of the rotors forming part of the motors. Muller is silent on moving a work object beyond the beam end situation but Crorey teaches handling an object beyond an end situation (figure 16) in order to reach locations located beyond the beam end situation (implicitly stated in the figures). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Crorey to have the gripper capable of handling an object beyond an end situation in order to reach locations located beyond the beam end situation.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588), Warren (US 3,805,943) and Brake (EP 180,050).

Re claim 3, Muller is silent on intermediate storage of the work object and having multiple grippers. Warren teaches use of two grippers in order to transfer multiple objects simultaneously (figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Muller by the general teaching of Warren to have two grippers in order to transfer multiple objects simultaneously. Brake teaches intermediate storage of the work object (figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Brake in order to intermediate storage to allow a process step be done on the object prior to it being transferred to the next work station.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588) and Dixon (US 3,958,740).

Re claims 5-7, Muller is silent on a "teach-in process" but Dixon teaches a "teach-in process" (column 3, 2nd paragraph from bottom) to allow to for easier programming (column 4, paragraph 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Dixon to have a "teach-in process" to allow to for easier programming.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588), Warren (US 3,805,943) and Dixon (US 3,958,740).

Re claim 8, Muller is silent on having multiple grippers. Warren teaches use of two grippers in order to transfer multiple objects simultaneously (figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Muller by the general teaching of Warren to have two grippers (and thus simultaneous gripping of two objects at different locations) in order to transfer multiple objects simultaneously.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller (DE 9417837) in view of Crorey (US 5,632,588), Dixon (US 3,958,740), Warren (US 3,805,943) and Brake (EP 180,050).

Re claim 9, Muller is silent on intermediate storage of the work object and having multiple grippers. Warren teaches use of two grippers in order to transfer multiple objects simultaneously (figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Muller by the general teaching of Warren to have two grippers (and thus simultaneous gripping of two objects at different locations) in order to transfer multiple objects simultaneously. Brake teaches intermediate storage of the work object (figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Muller by Brake in order to intermediate storage to allow a process step be done on the object prior to it being transferred to the next work station.

Conclusion

Applicant's arguments with respect to the rejections by Liljengren (US 5,520,502) have been considered but are moot in view of the new ground(s) of rejection.

Applicant's remaining arguments filed 9/17/04 have been fully considered but they are not persuasive.

Applicant argued that Muller does not teach the guiding of a work object along a pre-programmed path with continuous control and registration of each of the rotor units of the motors and that none of the other prior art presented teach this motor control. However, Muller and the cited prior art do teach these limitations. Applicant seems to be trying to argue something more than is actually claimed. Continuous control and registration of the rotor units are inherently part of any planned (pre-programmed) action

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or movement of a device. Mere motor and thus rotor control are part of any powered movement of this device and thus are taught by the references. Applicant seems be trying to read a special rotor control that is not actually present in the current claims.

At no time is Muller or Crorey out of control. Even if limit switches and other sensors are used the robot is continuously controlled. Furthermore Muller and Crorey are not randomly controlled and thus have a pre-programmed path. Furthermore Muller teaches in the second paragraph under "Description of the Invention" that the controls ensure the device is driven in a predetermined direction and speed. Also, Crorey teaches (column 13, lines 48-50) "appropriate computer systems can control the positioning of the various components...as necessarily to automatically achieve" the movements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Scott Lowe whose telephone number is 703-305-1940. The examiner can normally be reached on 6:30am-4:30pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 703-308-3248. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

msl

A handwritten signature in black ink that reads "Kathy Matecki". The signature is written in a cursive, flowing style.

KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600